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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,942	01/03/2002	Alain M. Sagnard	61301A	7761

109 7590 04/23/2003

THE DOW CHEMICAL COMPANY  
INTELLECTUAL PROPERTY SECTION  
P. O. BOX 1967  
MIDLAND, MI 48641-1967

EXAMINER

RHEE, JANE J

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 04/23/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/037,942	<b>Applicant(s)</b> SAGNARD ET AL.	
	<b>Examiner</b> Jane J Rhee	<b>Art Unit</b> 1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 January 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. The term "average" in claims 1,19,20 is a relative term which renders the claim indefinite. The term "average" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

### ***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,4-9,11-12 rejected under 35 U.S.C. 102(b) as being anticipated by Reeves et al. (5916672)

Reeves et al. discloses a building panel comprising at least two panel domains (figure 3 numbers 132,140), wherein each panel domain has an essentially homogeneous strength and an average compressive strengths (col. 6 lines 31-33) wherein the panel has at least two panel domains having different average compressive strengths (col. 6 lines 31-33) and is essentially free of a combination of hollow and solid foam strands (figure 3). Reeves et al. discloses at least one panel domain that is a conformable panel domain that allows the panel to reversibly bend from a planar to a nonplanar configuration (figure 9). Reeves et al. discloses that the panel has a primary face, a face opposing the primary face, a panel thickness, and a slit (figure 9 number 160) penetrating to a depth less than the panel thickness traverses the primary faces or

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the face opposing the primary face. Reeves discloses that each panel domain comprises a polymeric foam (col. 3 lines 38-39). Reeves discloses that the panel has alternating conformable and rigid panel domains (figure 3 number 132, 140, 136). Reeves discloses that the panel has a perimeter and the perimeter comprises at least one conformable panel domain (figure 3 number 132). Reeves discloses a conformable panel along at least one edge (figure 3 number 132). Reeves discloses that the panel domains are bands (figure 3 numbers 132, 140).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reeves et al.

Reeves et al. discloses the panel described above. Reeves et al. fail to disclose that the two domains differ in average compressive strength by at least 5%. Reeves et al. teaches that one domain has a higher density than the other domain (col. 6 lines 31-32), therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide two domains that differ in average compressive strength by at least 5%, in order to provide a more expandable cell in the lower density area (col. 3 lines 51-52).

4. Claims 3,10 rejected under 35 U.S.C. 103(a) as being unpatentable over Reeves et al. in view of Ducharme (5062244).

Reeves et al. discloses the panel described above. Reeves et al. fail to disclose that at least one panel domain is a conformable panel domain that, when compressed reduces at least one dimension of the panel thereby allowing insertion of the panel into a cavity, wherein the panel also has a compressive recovery that causes frictional retention of the panel within the cavity. Reeves et al. fail to disclose that the panel has at least one edge that comprises a tongue or groove profile. Ducharme teaches at least one panel domain is a conformable panel domain that, when compressed reduces at least one dimension of the panel thereby allowing insertion of the panel into a cavity, wherein the panel also has a compressive recovery that causes frictional retention of the panel within the cavity for the purpose of to insulate masonry building blocks (col. 1 line 10). Ducharme teaches that the panel has at least one edge that comprises a tongue or groove profile (col. 3 lines 21) for the purpose of preventing heat loss through the passages when compressed (col. 3 lines 22-23).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Reeves et al. with at least one panel domain is a conformable panel domain that, when compressed reduces at least one dimension of the panel thereby allowing insertion of the panel into a cavity, wherein the panel also has a compressive recovery that causes frictional retention of the panel within the cavity in order to insulate masonry building blocks (col. 1 line 10) as taught by Ducharme.

Furthermore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Reeves et al. with the panel that has at least one edge that comprises a tongue or groove profile in order to prevent heat loss through the passages when compressed (col. 3 lines 22-23) as taught by Ducharme.

4. Claims 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reeves et al. in view of Malone (4824720).

Reeves et al. discloses the panel described above. Reeves et al. fail to disclose that the foam has an average cell diameter within a range of from 0.01 millimeters to 10 millimeters. Reeves et al. fail to disclose that the foam has a density of 5 kilograms per cubic meter or more and less than 100 kilograms per cubic meter. Reeves et al. fail to disclose that at least one panel domain has an open cell content of 5 percent or 50 percent or more according to American Society for Testing and Materials method D2856A. Reeves et al. fail to disclose that at least one panel domain comprises coalesced polymeric foam strands and wherein the foam strands comprise polypropylene. Reeves et al. fail to disclose that at least one panel domain comprises coalesced polymeric foam strands having interstrand spaces. Malone teaches coalesced polymeric foam strands that comprise polypropylene (col. 1 lines 14-15, 30) and have interstrand spaces (col. 5 lines 20-22, 33-35) for the purpose of providing cushion properties (col. 1 lines 31-32). Malone teaches that the foam has a density of 5 kilograms per cubic meter (col. 5 line 23), the average cell diameter within the range of from 0.01mm to 10mm (col. 6 line 19), and the open cell content of 35 percent (col. 6

line 61) for the purpose of to allow the achievement of improved cushioning of objects particularly at low stat loadings (col. 5 lines 59-61).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Reeves et al. with coalesced polymeric foam strands that comprise polypropylene and have interstrand spaces in order to provide cushion properties (col. 1 lines 31-32) as taught by Malone.

Furthermore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Reeves et al. with that the foam has a density of 5 kilograms per cubic meter, the average cell diameter within the range of from 0.01mm to 10mm, and the open cell content of 35 percent in order to allow the achievement of improved cushioning of objects particularly at low stat loadings (col. 5 lines 59-61) as taught by Malone.


As to the open cell content of 50% or more, Malone discloses an open cell content of 35% (col. 6 line 61), it would have been obvious to one having ordinary skill in the art at the time the invention was made to have an open cell content of 50% or more since it has been held that discovering an optimum valued of result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205, USPQ 215 (CCPA 1980).

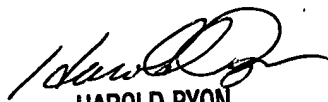
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jane J Rhee whose telephone number is 703-605-4959. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 703-308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

  
Jane Rhee  
April 17, 2003

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772 4/17/03